WHAT IS CLAIMED IS:

1. A composite material suitable for external and/or internal association with a living body and for rapid release of a beneficial agent, comprising:

- particles consisting essentially of a core component and at least one beneficial agent;

- the core component having a surface area less than approximately 10 M^2/gm, wherein the core component is a stoichiometrically stable material, said core component is an inorganic material selected from the group consisting of noble metals, metal oxides, metal nitrides, metal carbides, metal phosphates, metal carbonates, metal sulfates, metal halides, carbonaceous materials, ceramic materials, zeolites, SiO_2 and mixtures thereof;

- the beneficial agent is adsorbed on at least a portion of the surface of the core component; and

- wherein the core component is fabricated from a material having a hardness greater than the hardness of the first beneficial agent to, in turn, increase bioavailability of the first beneficial agent.

2. The composite material according to claim 1, wherein the beneficial agent is associated with an effervescent material.

3. The composite material according to claim 1, wherein the core component comprises a diameter of less than 400 nanometers.

4. The composite material according to claim 3, wherein the core component comprises a diameter ranging from approximately 1 to approximately 100 nanometers.

5. The composite material according to claim 1, wherein the core component is fabricated from a material that is at least one of substantially inert and bio-soluble.

6. The composite material according to claim 1, wherein the core component comprises either hygroscopic or hydrated material.

7. The composite material according to claim 1, wherein the core component is fabricated from at least one material selected from the group consisting essentially of, Al_2O_3, TiO_2, C, Ag, Au, Ag_2O, and mixtures thereof.

8. The composite material according to claim 1, wherein the core component is fabricated from an antibacterial material.

9. The composite material according to claim 1, wherein the beneficial agent is fabricated from at least one material selected from the group consisting essentially of a pharmaceutical agent, a medicament, a chemical agent, and mixtures thereof.

10. The composite material according to claim 1, wherein the beneficial agent comprises a first and a second beneficial agent wherein the second beneficial agent is associated with at least a portion of the first beneficial agent.

11. The composite material according to claim 10, wherein the first beneficial agent is fabricated from a material having a hardness greater than the second beneficial agent.

12. The composite material according to claim 10, further comprising a tertiary beneficial agent applied to at least a portion of the surface of at least one of the first beneficial agent and the second beneficial agent.

13. The composite material according to claim 1, wherein the component has a surface area of less than 0.5 m^2/g.

14. A composite material suitable for external and/or internal association with a living body and for rapid release of a beneficial agent, comprising:

- particles consisting essentially of a core component and at least one beneficial agent;

- the core component having a surface area less than approximately 10 M^2/gm, wherein the core component is a stoichiometrically stable material, said core component is an inorganic material selected from the group consisting of noble

metals, metal oxides, metal nitrides, metal carbides, metal phosphates, metal carbonates, metal sulfates, metal halides, carbonaceous materials, ceramic materials, zeolites, SiO_2 and mixtures thereof;;

- the beneficial agent is adsorbed on at least a portion of the surface of the core component;

- wherein the core component is fabricated from a material having a hardness greater than the hardness of the beneficial agent adsorbed thereon; and

- wherein the core component serves to increase the effective surface area of the beneficial agent relative to a beneficial agent unassociated with a core component, and, in turn, to increase bioavailability of the beneficial agent.

15. A process for fabricating a composite material for rapid release of a beneficial agent, comprising the steps of:

- providing particles consisting essentially of a core component and at least one beneficial agent wherein the core component has a hardness and a surface area less than approximately 10 M^2/gm, and wherein the core component is a stoichiometrically stable material, wherein said core component is an inorganic material selected from the group consisting of noble metals, metal oxides, metal nitrides, metal carbides, metal phosphates, metal carbonates, metal sulfates, metal halides, carbonaceous materials, ceramic materials, zeolites, SiO_2 and mixtures thereof;

- the beneficial agent has a hardness less than the hardness of the core component to, in turn increase bioavailability of the beneficial agent; and

- adsorbing the beneficial agent on at least a portion of the surface of the core component.

16. The process according to claim 15, further comprising the step of milling the beneficial agent and the core component.

17. The process according to claim 15, wherein the step of absorbing comprises spraying, brushing, rolling, dip coating, powder coating, misting, and/or chemical and/or physical vapor depositing the beneficial agent on at least a portion of the surface of the core component.

18. The process according to claim 15, wherein the step of providing particles comprises the step of providing particles having a surface area of less than 0.5 m^2/g.

19. The process according to claim 15, wherein the step of providing particles comprises the step of providing particles having a diameter of less than 400 nanometers.

20. The process according to claim 19, wherein the particles have a diameter of between approximately 1 nanometer and 100 nanometers.

21. The process according to claim 15, wherein the particles comprise a material that is at least one of substantially inert and bio-soluble.

22. The process according to claim 15 wherein the beneficial agent comprises a first beneficial agent and a second beneficial agent, the process further comprising the step of:

- associating the second beneficial agent with at least a portion of the first beneficial agent.

23. The process according to claim 22, further comprising the step of applying a tertiary beneficial agent to at least a portion of the surface of at least one of the first beneficial agent and the second beneficial agent.

24. A process for increasing the exposed surface area of a beneficial agent and for rapid release of a beneficial agent comprising the steps of:

- providing particles consisting essentially of a core component and at least one beneficial agent wherein the core component has a hardness and a surface area less than approximately 10 M^2/gm, wherein the core component is a stoichiometrically stable material, wherein said core component is an inorganic material selected from the group consisting of noble metals, metal oxides, metal nitrides, metal carbides, metal phosphates, metal carbonates, metal sulfates, metal halides, carbonaceous materials, ceramic materials, zeolites, SiO_2 and mixtures thereof;

- the beneficial agent has a hardness less than the hardness of the and

- adsorbing the beneficial agent on at least a portion of the surface of the core component, and in turn, increasing the surface area of the beneficial agent relative to the surface of the core component to, in turn, increase bioavailability of the beneficial agent.